

DOCUMENT RESUME

ED 157 381

FL 009 539

AUTHOR Gardner, R. C.
TITLE Attitudes and Aptitude in Learning French. Research Bulletin No. 13.
INSTITUTION University of Western Ontario, London. Dept. of Psychology.
SPONS AGENCY Department of the Secretary of State, Ottawa (Ontario).
PUB DATE May 78
NOTE 21p.
EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
DESCRIPTORS Academic Achievement; *Academic Aptitude; Aptitude Tests; Attitude Tests; Educational Counseling; Elementary Secondary Education; *French; *Language Ability; *Language Attitudes; Language Enrollment; Language Research; Predictive Ability (Testing); *Second Language Learning; *Student Attitudes; Student Motivation; Test Validity
IDENTIFIERS Attitude Motivation Inventory; Modern Language Aptitude Test; Value of Language Study

ABSTRACT

This address to school counselors discusses the role of aptitude and attitudes in learning French as a second language with attention to the senior elementary and high school levels. The Modern Language Aptitude Test (MLAT) and the Attitude Motivation Inventory (AMI) were administered to students. The MLAT and abilities it is designed to assess are discussed. Attitudinal variables of the AMI, integrativeness, motivation, attitudes toward the learning situation, class anxiety, and instrumentality, are described. Correlations suggest that prediction of achievement in French can be reasonably accurate if attention is paid to both aptitude and attitudes. Both MLAT and AMI evidence convergent validity because of substantial correlations with French grades. Only AMI has low correlation with non-French academic average. MLAT correlates as highly with academic average as it does with French grades. Language enrollment statistics for Ontario and implications of the findings for counseling are presented. (SW)

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ED157381

ATTITUDES AND APTITUDE IN LEARNING FRENCH

R. C. GARDNER

RESEARCH BULLETIN NO. 13
MAY, 1978

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"This project was funded by the Department of the Secretary of State under its programme to encourage language research in Canada."

FL009539

ATTITUDES AND APTITUDE IN LEARNING FRENCH

R. C. Gardner

University of Western Ontario

My purpose today is to discuss the role of attitudes (i.e., emotional characteristics) and aptitude (i.e., cognitive factors) in learning French as a second language. I intend to focus attention on the role of these two types of attributes in the senior elementary and high school situation -- since our research over the past 20 years has emphasized this level. I should say however that Louis Gliksmann (a graduate student in our department) has very recently extended our research to the university level, and his preliminary findings tend to complement those to be presented here. Thus the generalizations that I will be drawing seem applicable to a broad range of both age and education.

I realize that you are not French teachers, however, as counsellors you are in a position to influence a number of academic and career decisions, and I believe that the information I will present today is relevant to such decisions. Basically the conclusion that I want to leave you with is that achievement in French as a second language is mediated by two factors, attitudes and aptitude. As a consequence, I would suggest that when counselling students it might pay to consider both factors. In order to convince you of the validity of my basic conclusion, I feel it is necessary to describe in some detail the measures of aptitude and attitude that we have been using in our research and to show how they relate to measures of achievement in French. The two measures which I will be focusing on, are the Modern Language Aptitude Test (MLAT) developed by Carroll and Sapon in 1959, and the Attitude Motivation Inventory developed by Pat Smythe and myself in 1975.

Before beginning this however, I would like to put this into context by presenting census data on enrollment figures in French. The material shown on Slide 1 represents the percentage of elementary and secondary

Insert Slide 1 About Here

students studying French in Ontario for the years 1970-71 through to 1976-77. (I don't have the figures for 1975-76). It is obvious from the figure that since 1970-71 there has been a general increase in percentage enrollment in French at the elementary school level and a corresponding decrease at the secondary level. These figures could be due to a number of factors. The increase at the elementary level could reflect simply the increased support for French programs at that level, and the growing tendency (possibly as a result) to make attendance in such programs virtually compulsory. The decrease at the secondary level, could reflect simply the increase in the number of optional courses available to students and the fact that languages are generally no longer required for post secondary education. Regardless of the reasons for this pattern, it nonetheless seems apparent that interest in the French program for the secondary level tends to be falling despite the importance currently being placed on French for career opportunities in the government, and even national unity.

Both patterns would seem to have implications for those concerned with secondary school counselling. If there is any validity at all to the position that a knowledge of the two official languages is important both in the broader social context and for the individual's own future career,

the decreasing percentage enrollment at the secondary level deserves consideration. One might argue that counsellors should try to encourage more students to continue their French study. On the other hand, the increased percentage of students taking French at the elementary school level would suggest that in the very near future students coming to secondary school counsellors may have somewhat different interests or at least backgrounds with respect to French programs than those currently in the high school program. Because of both aspects, therefore, I believe it is a meaningful task for the counsellor to consider what type of advice he or she might give to a student with respect to the French program. (Incidentally I should say, that although I have presented here only the data for Ontario, the patterns in the other provinces are highly comparable).

Let us now consider the two major variables referred to in the title of this session, aptitude and attitudes.

Language Aptitude

Language aptitude refers to a set of abilities which are important in learning a second language. Since 1928 when the first language aptitude test (Special Prognosis Test) was developed, a number of such tests have appeared. They vary considerably in content depending upon the types of abilities they are meant to tap. Three commonly used tests today are:

1. The Modern Language Aptitude Test (Carroll & Sapon, 1959)
2. The Elementary Form of the Modern Language Aptitude Test (Carroll & Sapon, 1967)
3. The Language Aptitude Battery (Pimsleur, 1966).

The Modern Language Aptitude Test (MLAT) is the most extensively used and most favourably evaluated test. The testing time for the full battery is 65 minutes, while the short form, the last 3 subtests, requires 40 minutes. The test was developed to measure four abilities believed by Carroll (1974) to be the primary ones involved in second language acquisition. These abilities are:

1. Phonetic Coding. This is seen as the most important of the abilities and is defined as the ability to not only code but also assimilate phonetic material and hold it for long periods of time in memory.
2. Grammatical Sensitivity. This is seen as an awareness and appreciation of the function of grammatical elements in one's language.
3. Memory Ability. This is the capacity to remember large amounts of material and although it conceivably involves the use of some mnemonic system, this system is not specified.
4. Inductive Language Learning Ability. This involves the ability to induce patterns of the language from the primary language data and is seen as conceptually similar to general reasoning.

These four abilities are presumably tapped by the subtests of the Modern Language Aptitude Test. The five subtests of the Modern Language Aptitude Test are indicated on Slide 2, as well as sample items from two of the subtests, Spelling Clues and Words in Sentences.

Insert Slide 2 About Here

The Spelling Clues test obviously depends upon English vocabulary knowledge but also is believed to assess the phonetic coding ability referred to above. It looks like a vocabulary test in that students must choose from five alternatives the word which is nearest in meaning to a test word. It is unique in that the test word is spelled as it is pronounced, i.e., phonetically. For example, the word LUV is presented as a "disguised" spelling of the word love. The alternative most similar in meaning to the word love is alternative (C) affection. The second example presents the disguised spelling ERNST. If one considers this "word" carefully, the disguised word is found to be earnest and the correct alternative is the word sincere (Alternative B).

The words in sentences test was designed to measure grammatical sensitivity. In this test students are presented with a set of key sentences in each of which a word or phrase is underlined. In a sentence or sentences following each key sentence, five alternative words or phrases are underlined and students must select the one that performs the same function as the item from the key sentence. Although no grammatical terminology is used in the test it is obviously a test of grammar knowledge. Consider the two sample items. In the first one, the key sentence is:

"London is the capital of England.", and the task is to find in the test sentence, the word which serves the same function as London in its sentence. The test sentence is:

"He liked to go fishing in Maine." Since London is the subject of the test sentence, the correct answer is He (Alternative A).

In the second example, the key sentence is:

"There was much Talk about a rebellion", and the test word is talk. Which of the five underlined words from the four sentences following it, performs the same function in its sentence as Talk in the key sentence. The correct answer is given as Doubt (Alternative B).

Before considering how scores on this test relate to measures of achievement in French, let us first consider the concept of attitudes as it relates to second language learning.

Attitudes

When attention is focused on attitudes in second language acquisition, a number of attributes are considered. To begin with, the term attitude refers to feelings for or against an attitude object. Studies of the role of attitudes in second language acquisition have tended to focus on attitudes towards groups who speak the language in question, attitudes towards learning the language, attitudes towards the applicability of various reasons for learning the language, etc. Time does not permit a discussion of the research which has led up to the identification of the various attitudes which have been shown to relate to second language achievement, but there is a large body of research on this topic (for reviews see Gardner, 1977; Gardner, Smythe, Clément & Glikson, 1976). Instead, what I would like to do is to focus attention on those attitudinal measures that we have identified as being important for second language achievement. Slide 3 presents a breakdown of the major attitudinal

Insert Slide 3 About Here

components and the subtests which assess these components. The test battery that Pat Smythe and I have developed has been given the acronym "AMI" to stand on the one hand for attitude/motivation index and on the other to emphasize the general friendly nature of the attributes going to make up the index. The entire battery requires approximately 35 minutes to administer. It consists of a series of attitude items involving statements with which students indicate their agreement or disagreement, evaluative rating scales, and multiple choice questions.

The 3 major categories of attitudinal variables are shown on Slide 3, with the actual attitude scales reflecting these listed below in each category. The 3 major attitudinal variables are:

1. Integrativeness. This refers to an attitudinal cluster involving groups who speak French, reasons for learning French in order to communicate and interact more with individuals who speak it, and reactions to foreign languages in general.
2. Motivation. This refers to a desire to learn the second language, attitudes toward learning it, and a correspondingly high level of effort expended toward this end.
3. Attitudes toward the Learning Situation. This refers to evaluative reactions toward both the French course and the French teacher.
4. Others. This category subsumes 2 measures which cannot be classified above but which are included in the battery because of their relevance to learning a second language. The measure of French Class Anxiety refers to feelings of concern or worry when called upon to speak French in the classroom situation. The measure of Instrumentality refers to feelings about the appropriateness of reasons for learning French which focus on the utilitarian considerations.

Much of our research has been concerned with studying the relationships of measures of language aptitude and attitudinal characteristics to achievement in French, and it is 2 aspects of this research which I would like to discuss in the time remaining. In our research, however, we have also focused on other aspects. These include:

1. Attitudinal characteristics related to the tendency to continue or drop out of the French program.
2. The relation of attitudes to behaviour in the language classroom.
3. The effects of intensive language programs on attitudes (Gardner, Smythe & Brunet, 1978).
4. The effects of attitudes on the willingness to take part in bicultural exchange programs and the effects of such programs on attitudes (Clément, Gardner & Smythe, 1977a).
5. The relation of attitudes to English achievement among francophones (Clément, Gardner & Smythe, 1977b).

My purpose today is to focus on the relation of attitudes and aptitude to achievement -- particularly grades in French. Slide 4 presents data

Insert Slide 4 About Here

from 28 different samples ($n = 162$) showing the correlations between grades in French and AMI, and grades in French and the MLAT.

Examination of Slide 4 suggests that the MLAT tends to correlate slightly higher with grade than does AMI. In point of fact, however, the medians are very comparable (i.e., .40 for AMI and .41 for the MLAT). The range of correlations for AMI is somewhat less than that for the MLAT.

The correlations for AMI range from .15 to .51, while those for the MLAT range from -.03 to .59. That is, although the MLAT tends to evidence higher correlations than AMI (in only 9 samples are the correlations for AMI higher than those for MLAT), the range of correlations and the medians are comparable.

The column labelled Multiple Correlations shows the effects of combining both the MLAT and AMI for predicting French grades. In this case, the relationships are generally improved (as one would expect). The median correlation is .52, with a range from .35 to .69. These correlations are high enough to suggest that prediction of achievement in French can be reasonably accurate if attention is paid to both aptitude and attitudes. It follows, therefore, that both factors are involved in learning a second language.

This table indicates a fair degree of convergent validity for both the attitude and aptitude battery. In each of the studies from which the correlations were obtained, the MLAT and AMI were administered in the fall of the academic year, while course grades were obtained the following June. That is the coefficients presented are predictive validity coefficients. Focusing on convergent validity, however, tells only half the tale. Attention should also be directed towards divergent validity. By convergent validity, we mean that measures should correlate substantially with measures with which they should be related. Thus, it would be expected that both AMI and the MLAT should correlate highly with grades in French if both aptitude and attitudes (as assessed) are important for achievement in French. By divergent validity, we mean that variables should not correlate with measures

with which they should not be related. Thus if language aptitude and language attitudes are important for achievement in French but not in other academic subjects, we would expect that the measures would not correlate appreciably with general academic average. Slide 5 presents evidence from two geographical areas, relating to convergent and divergent validity for both the MLAT and AMI. The correlations with French grades

Insert Slide 5 About Here

can be viewed as indices of convergent validity, those with academic average as assessments of divergent validity. The results presented in Slide 5 indicate that whereas both the MLAT and AMI evidence convergent validity by virtue of the fact that their correlations with French grades are generally substantial, only AMI evidences divergent validity. That is, the correlations of AMI with general academic average (not counting French) tend to be low and not significant. The MLAT, on the other hand generally correlates as highly with academic average as it does with French grades. This is not meant to downgrade the importance of the Modern Language Aptitude Test for predicting achievement in French, but merely to indicate that the abilities being tapped seem to be important not only for French achievement but also achievement in most academic subjects.

What then does all this have to do with counselling students? As I stated at the beginning, the data indicate that achievement is mediated by two factors, attitudes and aptitude. Therefore, if a student expresses positive attitudes toward French and has a demonstrated ability

he should be encouraged to take French. And of course the counsellor would so encourage him! What, however, of the student who lacks the ability? Should he be encouraged to study French? The present findings would suggest that if his attitudes were negative, he probably should not. If, however, he expresses positive attitudes, he probably should be encouraged. The point is that ability is not the sole determinant of achievement. With appropriate attitudes, students can achieve a high level of achievement. More importantly, with such attitudes they can receive considerable reward by their experiences in the French class. If attention is directed only to ability, these students may not always be encouraged to fulfill their potential.

What about the student with a high level of ability? Should he necessarily be encouraged to study French? The answer suggested by our data is that this would depend on his attitudes. If he lacks the appropriate attitudes, he could experience considerable dissatisfaction in the French class, and could do poorly. His ability may carry him through, but it is highly probable that he would do more poorly than he should.

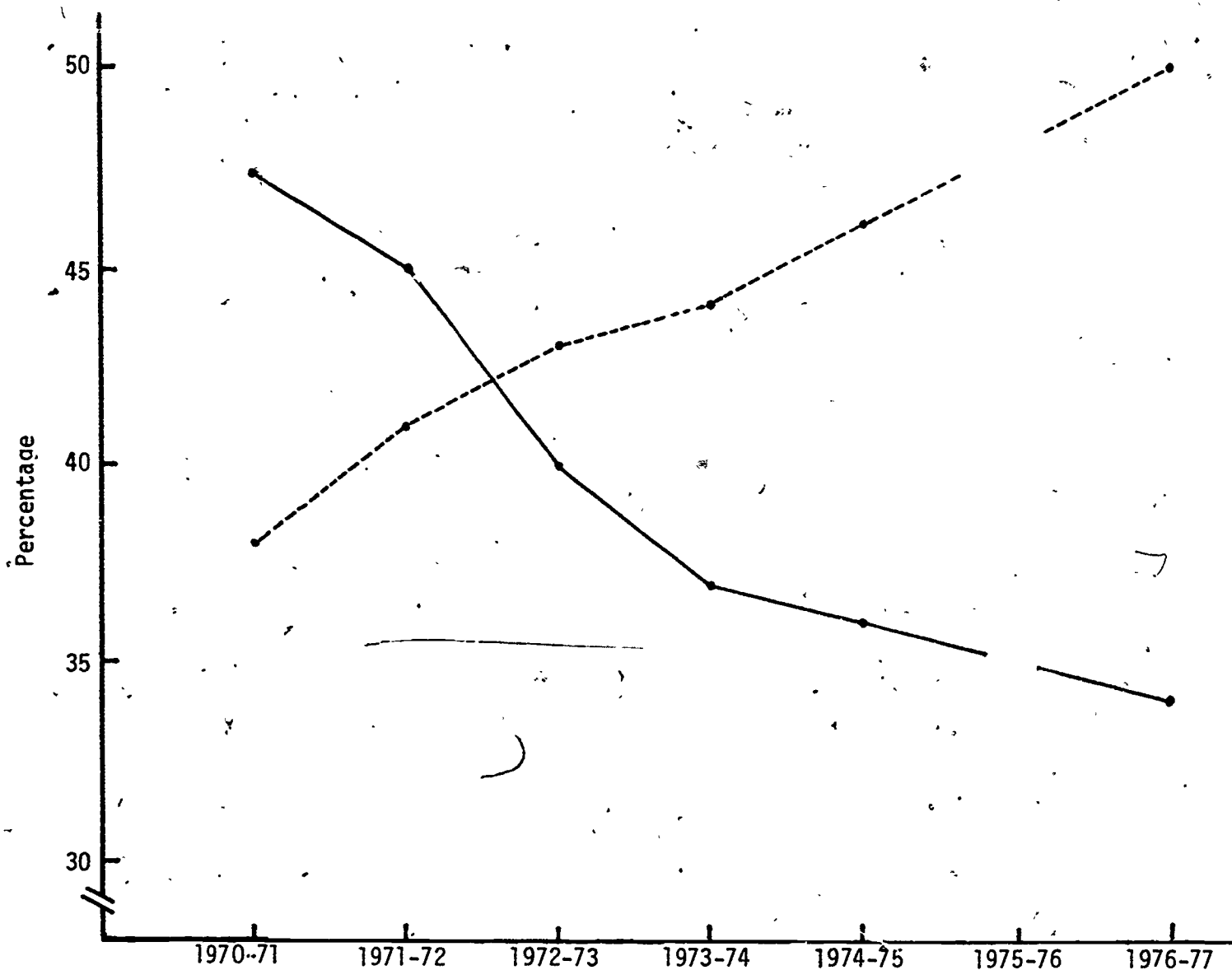
Many of the attitude measures included in the AMI involve attitudes toward French speakers, the French language, the value of interacting with French speaking people, foreignness, etc... It does not seem fortuitous that such attitudes are related to achievement in French. Learning the language of another group involves learning more than just another language code. The speech sounds, grammatical constructions, orthography, etc... are characteristics of another cultural community. As such, reactions to the other community or to other cultures in general can influence the extent to which individuals acquire the other language.

In this respect, the French course (or any language course) is different from any other course offered in the school program. Mathematics, geography, or what have you are aspects of the students own culture. French (or any language), however, is an aspect, and an important one, of another culture. Such considerations would suggest that attention should be directed to attitude as well as aptitude when counselling students.

In the body of the paper, I presented statistics concerning the relation of measures of aptitude and attitudes to grades in French. When discussing the implications I referred to the high or low ability student with or without "appropriate" attitudes. In point of fact my generalizations are properly limited to the use of these terms as they relate to the MLAT and the AMI. Despite the correlations between the MLAT and academic average, it is not always reasonable to equate a high level of language aptitude with high academic performance. Particularly, when French achievement is assessed by something other than French grades, language aptitude is a better predictor of achievement than is overall academic achievement. Similarly, attitudes cannot easily be equated with other indices readily available. In short, to make the type of judgments in counselling that I am suggesting, it could be argued that use should be made of the MLAT and AMI. I am not here, however, to sell either test. Under many circumstances, I think it should be possible for a counsellor to make educated judgments about relevant attitude and aptitude variables, and counsel students on the basis of these judgments. The major point that I want to make is that you consider both factors, aptitude and attitudes.

References

- Carroll, J. B. Aptitude in second language learning. Proceedings of the Fifth Symposium of the Canadian Association of Applied Linguistics, 1974, 8-23.
- Carroll, J. B., & Sapon, S. M. Modern Language Aptitude Test, Form A. New York: The Psychological Corporation, 1959.
- Carroll, J. B., & Sapon, S. M. Modern Language Aptitude Test, Elementary Form. New York: The Psychological Corporation, 1967.
- Clément, R., Gardner, R. C., & Smythe, P. C. Inter-ethnic contact: Attitudinal consequences. Canadian Journal of Behavioural Science, 1977a, 9, 205-215.
- Clément, R., Gardner, R. C., & Smythe, P. C. Motivational variables in second language acquisition: A study of francophones learning English. Canadian Journal of Behavioural Science, 1977b, 9, 123-133.
- Gardner, R. C. Social factors in second language acquisition and bilinguality. Invited chapter in Individual, Language and Society, 1977, 103-148, published by the Canada Council.
- Gardner, R. C., & Smythe, P. C. Second language acquisition: A social psychological approach. Research Bulletin No. 332, University of Western Ontario, 1975.
- Gardner, R. C., Smythe, P. C., & Brunet, G. R. Intensive second language study: Effects on attitudes, motivation and French achievement. Language Learning, 1977, 27, 243-261.
- Gardner, R. C., Smythe, P. C., Clément, R., & Gliksmann, L. Second language learning: A social psychological perspective. Canadian Modern Language Review, 1976, 32, 198-213.
- Pimsleur, P. Pimsleur Language Aptitude Battery. New York: Harcourt Bruce Jovanovitch, Inc., 1966.



SLIDE 1

PERCENTAGE OF SECONDARY AND ELEMENTARY STUDENTS IN ONTARIO ENROLLED
IN FRENCH OVER A SEVEN YEAR PERIOD

Secondary

Elementary

MODERN LANGUAGE APTITUDE TEST (MLAT)

J. B. Carroll and S. Sapon (1959)

FIVE SUBTESTS:

1. Number Learning
2. Phonetic Script
3. Spelling Clues
4. Words in Sentences
5. Paired Associates

SAMPLE ITEMS:

SPELLING CLUES:

LUV

- (a) carry
- (b) exist
- (c) affection
- (d) wash
- (e) spy

ERNST

- (a) shelter
- (b) sincere
- (c) slanted
- (d) free
- (e) impatient

WORDS IN SENTENCES:

LONDON is the capital of England.

He liked to go fishing in Maine.

A B C D E

There was much TALK about a rebellion.

Where is John?

A

There is no doubt about it.

B

C

There lay the dead horse.

D

There I found my answer.

E

SLIDE 3

ATTITUDE MOTIVATION INDEX

R. C. Gardner and P. C. Smythe (1975)

INDICES AND SUBTESTS

INTEGRATIVENESS:

1. Integration
2. Attitudes toward French Canadians
3. Attitudes toward the European French
4. Interest in Foreign Languages

MOTIVATION:

5. Motivational Intensity
6. Desire to Learn French
7. Attitudes toward Learning French

ATTITUDES TOWARD THE LEARNING SITUATION:

8. French Course - Evaluation
9. French Teacher - Evaluation

OTHERS:

10. French Class Anxiety (-)
11. Instrumentality

CORRELATIONS OF AMI AND MLAT WITH GRADE

	AMI	MLAT	MULTIPLE CORRELATION
GRADE 7			
REGION 2	.43	.46	.59
3	.43	.19	.47
4	.34	.24	.40
6	.35	.33	.48
GRADE 8			
REGION 1	.37	.44	.57
2	.39	.54	.60
3	.29	.55	.63
4	.32	.32	.42
6	.25	.34	.43
GRADE 9			
REGION 2	.31	.51	.54
3	.42	.46	.56
4	.38	.40	.52
5	.29	.46	.52
6	.32	.27	.37
GRADE 10			
REGION 1	.42	.43	.59
2	.33	.50	.57
3	.43	.42	.57
4	.28	.41	.51
5	.47	.38	.60
6	.42	-.03	.43
7	.50	.55	.69
GRADE 11			
REGION 1	.43	.59	.67
2	.43	.37	.52
3	.15	.50	.51
4	.45	.48	.62
5	.35	.39	.52
6	.51	.26	.56
7	.23	.27	.35
MEDIAN	.40	.41	.52

SLIDE 5

CONVERGENT AND DIVERGENT VALIDITY COEFFICIENTS FOR THE MLAT AND THE AMI FOR FIVE GRADE LEVELS IN TWO AREAS OF CANADA

	AREA A		AREA B	
	MLAT	AMI	MLAT	AMI
GRADE 7				
FRENCH	.49**	.37**	.33**	.31**
ACADEMIC AVERAGE	.48**	.32**	.44**	.17
GRADE 8				
FRENCH	.56**	.40**	.37**	.30**
ACADEMIC AVERAGE	.52**	.13	.41**	.00
GRADE 9				
FRENCH	.50**	.36**	.38**	.20
ACADEMIC AVERAGE	.54**	.15*	.36**	.24
GRADE 10				
FRENCH	.46**	.24**	.26*	.26*
ACADEMIC AVERAGE	.25**	.07	.22	.10
GRADE 11				
FRENCH	.23**	.42**	.21*	.44**
ACADEMIC AVERAGE	.26**	-.03	.25*	-.03

** p < .01